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ABSTRACT

Applying Social Cognitive Career Theory to preservice teachers, a study examined to what extent dispositional optimism and a subjective sense of performance during an internship predict changes in career self-efficacy. The study first determined whether a sample of preservice teachers experienced positive changes in career self-efficacy after an internship. A sample of 66 preservice teachers at a large southern university completed a measure of career self-efficacy and the LOT-R (Life Orientation Test-Revised), which measured dispositional optimism prior to beginning their internship. After a three-month internship, the subjects again completed measures of career self-efficacy and subjective performance ratings. Results indicate that the best predictors of increasing career self-efficacy during an internship for preservice teachers were the following: (1) level of preexisting career self-efficacy; and (2) subjective beliefs about their performance during the internship. These factors had a greater effect than the personal trait of dispositional optimism. The findings suggest internships may be a learning experience that successfully leads to increases in career self-efficacy. In addition to showing the effectiveness of internships in increasing career self-efficacy, the study shows the importance of providing self-relevant performance feedback during an internship. (Appendixes include the survey instruments and 34 references.) (YLB)

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THE EFFECT OF INTERNSHIP AND A PERSONAL TRAIT ON CAREER DEVELOPMENT

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THE EFFECT OF INTERNSHIP AND A PERSONAL TRAIT ON CAREER DEVELOPMENT

Investigating how student characteristics impact collegiate experiences, this study first determined there was an increase in career self-efficacy following an internship for pre-service teachers. Results of a correlational study show the best predictors of this increase to be subjective beliefs about performance during the internship, over and above the personal trait of optimism. This personal dispositional trait may not be moderating or biasing the interpretation of performance during an internship. Along with showing the effectiveness of internships in increasing career self-efficacy, this study shows the importance of providing self-relevant performance feedback during an internship.

THE EFFECT OF INTERNSHIP AND A PERSONAL TRAIT ON CAREER DEVELOPMENT

I. Introduction

The choices that students make, particularly concerning their careers, can drastically shape students' life courses by determining competencies, interests and even social contacts (Bandura, 1997). Career self-efficacy (belief that one can successfully accomplish job duties, locate employment and advance within the field of choice) impacts their career choice. Self efficacy beliefs are developed through assessing performance and abilities in various learning experiences, such as internships. While there is evidence that internships increase self-efficacy (Pedro, 1984), other studies show conflicting evidence, indicating the need for additional research (Brooks, Greenfield, & Joseph, 1995). Additionally, there are student characteristics that can impact how performance information is perceived during experiences such as internships.

Purpose of the Study

Applying Social Cognitive Career Theory to pre-service teachers, the purpose of this study was to examine to what extent dispositional optimism and a subjective sense of performance during an internship predict changes in career self-efficacy. The study first determined if a sample of pre-service teachers experienced positive changes in career self-efficacy after an internship. The predictive research that followed the analysis of the change in career self-efficacy affords some measure of predicting these results again.

Rationale

This study is important because internships, a realistic view of what a job is like, can scare people off because they doubt their abilities to succeed even if abilities are high (Bandura, 1997). In other words, it may be a perception of inefficacy that causes people to leave their career rather than a lack of ability. Additionally, individual dispositions can

impact (1) how individuals process information during this internship, or (2) the amount of effort extended during an internship, resulting in self-efficacy beliefs. Finally, in a meta analysis of 20 years of research on college students, Terenzini and Pascarella (1991) identified the need to study individual student differences and how they impact collegiate experiences. Results have implications for measuring program effectiveness along with identifying student needs during collegiate experiences such as internships.

Definition of Terms

The following terms are defined for the purposes of this study as:

Career Self-Efficacy: belief that one can successfully accomplish job duties, locate employment and advance within the field of choice (Brooks, et al., 1995)

Performance Accomplishments: learning experiences that may enhance or diminish career self-efficacy(Hackett & Byars, 1996). An internship is considered a performance accomplishment for this study

Dispositional Optimism – is defined as a stable disposition to expect that good things will happen in the future (Scheier & Carver, 1987).

II. SUMMARY OF RESEARCH

Internships as performance accomplishments have received little attention as a source of career self-efficacy (Brooks, et al., 1995). Personal factors affect how an individual processes information regarding performance during these learning experiences and is an area needing additional research (Lent, et al. 1994). Individual dispositions can impact (1) how individuals process information during internships, or (2) the amount of effort extended during an internship. Internships are one of the college learning experiences that can scare students away from a career because they doubt their abilities to succeed even if abilities are high (Bandura, 1997). Based on Social Cognitive Career Theory (Hackett & Brown, 1981, 1995), developing a perception of efficacy for

students during internships may be more important in predicting future career behavior that actual performance.

Evidence shows that successful performance accomplishments (such as internships) lead to increases in career self-efficacy (Hackett, et al. 1990; Hackett and Campbell, 1987; Matsui, Matsui, & Ohnishi, 1990; Luzzo, et al. 1999). Specifically looking at internships as a performance accomplishment, research shows that females in a business-related internship experience significant positive changes in career self-efficacy (Pedro, 1984). Another study, was unable to show any relationship between an internship experience (as opposed to no internship experience) and career self-efficacy (Brooks, et al. 1995). These studies measured self-efficacy for career processes such as beliefs about abilities to successfully accomplish job tasks, obtaining and advancing within a job. Finally, Feldman and Weitz (1990) showed that students who had positive job expectations were more like to have positive internship experiences. Additionally, the internship characteristic of autonomy, and skill variety were important in influencing career attitudes.

Teaching self-efficacy studies, which measure a more specific domain of self-efficacy, show that internships both increase and decrease certain aspects of teaching efficacy. Pre-service teachers experience positive changes in personal teaching efficacy or beliefs about teaching skills (Kazelskis, et al. 1991; Hoy & Woolfolk, 1990; Cole, 1995) with brief placements showing no changes in self-efficacy (Cole, 1995). However, on a second dimension of general teaching efficacy, beliefs about ability to impact student learning, there are either no changes or decreases in self-efficacy. There is evidence that student teachers may actually differ from students in other types of training programs in that they hold strong beliefs in their capabilities (Lanier & Little,1986) which could lead to inflated self-efficacy beliefs prior to entering the career.

Research applying social cognitive theory has given significant attention to personal factors which could potentially impact a learning experience or internship. Bandura summarizes (1997) that human functioning is better predicted by self-efficacy over global personality traits. Research shows the powerful relationship between self-efficacy and performance regardless of personal traits such as dispositional optimism, affect, and control (Cozzarelli, 1993; Dzewaltowski). Looking specifically at dispositional optimism, which has been given significant attention in SCT literature, there is a great deal of evidence that dispositional optimism increases performance in specific areas such as college adjustment, academic performance, and health behaviors (Aspinwall & Taylor, 1992; Lai & Wan, 1996; Billingsley, 1993; Aydin, & Tezer, 1991; Lee, Ashford, Jamieson, 1993; Shepperd, et al., 1996). Optimists may use more adaptive coping methods, use social support more effectively, have lower levels of anxiety, and recall past performances in an overly positively light (Lai & Wan, 1996; Aspinwall, & Taylor, 1992; Scheier, 1986). However, when comparing the strength of relationships, self-efficacy is a better predictor of performance over dispositional optimism.

There is a need within Social Cognitive Career Theory to investigate the relationships and influence of personal factors on the performance /self-efficacy relationships during learning experiences (Lent, Brown, & Hackett, 1996). Personal factors related to career self-efficacy include: Instrumentality vs. expressiveness, personal hardiness, cognitive complexity, coping style, and social support, gender, and race/ethnicity. Variables that may interact with self-efficacy include: cognitive complexity, coping style, SES, and social support (Nevill, et al. 1986; O'hare & Tamburri, 1986; Rotberg, et al. 1987; Hackett, et al. 1992).

There are two lines of studies in Social Cognitive Career theory investigating personal traits that could impact learning experiences. Research shows that attributions modify the relationship between performance accomplishments and self-efficacy (Zilber,

1991). There is also evidence that Locus of Control does not modify the relationship between performance accomplishments and self-efficacy (Matsui, Matsui & Ohnishhi,1990) revealing the strength of the relationship between performance and self-efficacy regardless of the amount of this trait an individual possesses. There is no evidence of investigating the personal factor of dispositional optimism and its impact on the performance/self-efficacy relationship in Social Cognitive Career Theory.

III. METHODOLOGY

A sample of sixty-six pre-service teachers at a large southern University completed a measure of career self-efficacy (Brooks, et al., 1995) and the LOT-R (Scheier et al., 1994) measuring dispositional optimism prior to beginning their internship, Fall of 1999. After a three-month internship, the subjects again completed measures of career self-efficacy and subjective performance ratings (Luzzo et al., 1999). Pre and post scores were matched by subject.

The hypotheses tested were stated as follows:

1. Pre-service teachers who complete an internship and subjectively agree that their performance was successful will have significant changes in career self-efficacy (as measured by procedures adapted by Brooks, et al., 1995, Betz & Hackett, 1981.)
2. There will be a relationship between dispositional optimism (as measured by the Life Orientation Test-Revised developed by Scheier , Carver, & Bridges, 1994) and changes in career self-efficacy of pre-service teachers.
3. There will be a relationship between performance accomplishments (as measured subjectively by a rating of successful performance during the internship) and changes in career self-efficacy of pre-service teachers.
4. Performance accomplishment will significantly account for variance in career self-efficacy changes even after the contribution of dispositional optimism has been

accounted for.

5. Dispositional optimism will modify the relationship between Performance accomplishment and changes in career self-efficacy of pre-service teachers.

Analysis Method and Results

A single sample paired t-test was used to determine if pre-service teachers who completed an internship had significant changes in career self-efficacy. After showing a statistically significant increase occurred in measures of career self-efficacy, a hierarchical multiple regression and correlation procedure was used to evaluate a subjective rating of performance during an internship and dispositional optimism as predictors of this change, comparing the amount of variance accounted for by each variable. Analysis of partial variance was used to assess if subjective ratings of performance during the internship and/or dispositional optimism predict changes in career self-efficacy. Pre-self-efficacy scores were seen as distorting post-self-efficacy scores and were first partialed out of the post-self-efficacy scores in order to determine the effect of predictor variables on post-self-efficacy scores. Procedures were designed to compare (a) the relationship between subjective performance accomplishment ratings of pre-service teachers and changes in career self-efficacy to (b) the relationship between dispositional optimism and changes in career self-efficacy. Additionally, the model was designed to determine the interaction effects of subjective performance ratings and dispositional optimism on changes in career-self efficacy. The prediction model was revised to exclude dispositional optimism due to a lack of contributions to overall prediction and questions concerning linearity. Results show the best predictors of increasing career self-efficacy during an internship are subjective beliefs about performance during the internship and pre-existing career self-efficacy prior to the internship. Although there was a significant positive relationship between dispositional optimism and pre-self-efficacy prior to the internship, there was only a non significant

negative relationship between dispositional optimism and the change in career self-efficacy. There were no interaction effects of subjective performance ratings and dispositional optimism on changes in career self-efficacy. However, results should be interpreted with caution as this population of pre-service teachers may exhibit an inflated sense of self-efficacy (Lanier & Little, 1986) yet highly individualized types of optimistic thinking in preparation for performance (Bandura, 1997).

All assumptions for a paired t-test were met (homogeneity of variance, paired values, normal distribution of difference scores) as evidenced by normal plots of difference scores, and Levene Statistic (1.511). Additionally, all assumptions of multiple regression were also met (linearity of relationship between the dependent and independent variables, independence of predictor variables, heteroscedasticity, normal distribution of variables) as evidenced by residual plots, Durbin Watson statistic (.97), and histogram of residuals. Measures of collinearity of multiple variables were also acceptable: VIF values ranging from 1.14 to 2.64, Tolerance value .87. Finally, a lack of redundant relationships among independent variables was evidenced in the correlation matrix.

IV. DISCUSSION

This study suggests that the best predictors of changes in career self-efficacy after an internship for pre-service teachers: the level of initial career self-efficacy along with subjective beliefs about their performance during the internship, over and above the personal trait of dispositional optimism. There was a statistically significant increase in career self-efficacy. Although the cause of this change cannot be described, this study affords some measure of repeating these results with the predictive procedures that followed the measure of the increase. This would indicate that internships may be a learning experience that successfully leads to increases in career self-efficacy. This study also suggests that any performance assessment of students in

internships should include subjective assessments as well as any objective measures of performance. Performance assessment should focus on specific levels of abilities to discourage students from focusing on personal characteristics. Likewise, evaluation procedures should also include a high level of self-reflection of abilities such as that used in a portfolio evaluation procedure (Shannon, 1994).

For this population, it may be more important to identify students with low career self-efficacy rather than those having a negative outlook, for being at risk during an internship. Students with low career self-efficacy may need to be paired with strong mentors or models. Additionally, positive self-monitoring may be critical for this population during an internship

Future Research Recommendations

Future studies need to investigate a possible decrease in career self-efficacy after a time-lag for this population after facing the realities of the profession on a daily basis. Additionally, subjective measures of performance need to be paired with objective measures to address the possibility that an internship may not be providing enough opportunities to accurately self-assess abilities. Finally, the specific characteristics of internships need to be included in future studies.

The Correlation Matrix of All Variables in Initial Full Model

	Post CSE	Pre-CSE	LOT-R	Subj. Perf.	Interaction
Post CSE	—	.646*	.156	.599*	.485*
Pre CSE	.646*	—	.389*	.360*	.494*
LOT–R	.156	.389*	—	.141	.757*
Subj. Perf	.599*	.360*	.141	—	.745*

*p<.01

Descriptives

	Range	Mean	SD	Cronbach Alpha	Inter-item Corr.
Career Self-efficacy					
Pre-Career Self-efficacy	19 to 30	26.73	2.77	0.85	.59 - .68
Post-Career Self-efficacy	24 to 30	28.32	1.92	0.80	.51-0.7
Former Study		24.17	3.47	0.75	
LOT-R					
Present Study	9 to 24	17.092	3.28	0.84	.25 - .69
Former Studies		14.28-15.24	3.97-4.33	0.78	.43 - .63
Performance Accomplishment					
Present study	7 - 10	9.2	0.8269		
Former Study	6 - 10	8.2	1.16		

Comparison of Original Model Summary to Revised Model Summary

Model	R^2	F for R^2	Total R^2	R^2 Diff
1. Original Model				
Predictors: Constant,				
Pre self-efficacy,	.417	45.838*		
Disp. Optimism,	.011	1.165		
Performance,	.154	22.887*		
Interaction	.008	1.198	.59	
2. Revised Model				
Predictors: Constant,				
Pre self-efficacy,	.417	45.838*		
Performance	.154	22.662*	.571	
Model 1 and Model 2				.019

*p<.01

Correlation Coefficients for Predictor Variables in the Prediction of Changes in Career Self-efficacy–Original Model

Predictor	Partial Correlation	t Value	Regression Coefficient	Standardized Regression Coefficient
PreCareer Self-efficacy	0.646	6.77*	.448	.646
LOT–R	-.135	-1.079	-6.54	-.112
Subjective Perf	0.519	4.784*	.979	.421
Interaction	-0.139	-1.095	-7.58	-.851

*$p < .01$

Correlation Coefficients for Predictor Variables in the Prediction of changes in Career Self-efficacy–Revised Model

Predictor	Partial Correlation	t Value	Regression Coefficient	Standardized Regression Coefficient
PreCareer Self-efficacy	.646	9.183*	.448	.646
Subjective Perf	0.514	4.760*	.978	.421

*p < .01

Post Self-Efficacy/Performance Measure

Code _____

1. Regardless of your final evaluation, how do you rate your performance during your internship.

1.(Not success at all) 2 3 4 5 6 7 8 9 10 (very successful)

2. Rate your ability to complete job-related tasks of a teacher.
1 not at all sure 2 3 4 5 6 7 8 9 10 completely sure

3. Rate your ability to obtain a job as a teacher.
1 not at all sure 2 3 4 5 6 7 8 9 10 completely sure

4. Rate your ability to advance within the job (promotions, tenure).
1 not at all sure 2 3 4 5 6 7 8 9 10 completely sure

Life Orientation Test-Revised (LOT-R)

Instructions:
Please answer the following questions about yourself by indicating the extent of your agreement using the following scale.

(0) = strongly disagree
(1) = disagree
(2) = neutral
(3) = agree
(4) = strongly agree

Be as honest as you can throughout and try not to let your responses to one question influence your response to other questions. There are no right or wrong answers.

_____ 1. In uncertain times, I usually expect the best.

_____ 2. It's easy for me to relax.

_____ 3. If something can go wrong for me, it will.

_____ 4. I'm always optimistic about my future.

_____ 5. I enjoy my friends alot.

_____ 6. It's important for me to keep busy.

_____ 7. I hardly ever expect things to go my way.

_____ 8. I don't get upset too easily.

_____ 9. I rarely count on good things happening to me.

_____10. Overall, I expect more good things to happen to me than bad.

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Scheier, M, Carver, C. & Bridges, M.(1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem) Journal Personality & Social Psychology. 67(6),1063-1078.

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